# **DEPARTMENT OF THE ARMY**

**WASHINGTON DC 20310** 

2 7 JUN 2019

# MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Army Directive 2019-22 (Conduct of Electronic Warfare Support in the Army)

- 1. (U//FOUO) References. A list of references is in the enclosure.
- 2. (U//FOUO) This directive provides clarification and guidance for the development and fielding of and training on new and existing electronic warfare support (ES) capabilities conducted under Secretary of the Army authority. This directive does not supersede National Security Agency and Department of Defense policy or operational authority vested by law in combatant commanders, nor does it alter command relationships and authorities.
- 3. (U//FOUO) Pursuant to the National Defense Strategy and the U.S. Army In Multi-Domain Operations 2028, the modern operating environment calls for the U.S. to confront adversaries contesting the air, land, sea, space, and cyberspace domains, as well as the electromagnetic spectrum (EMS). As part of the Multi-Domain Operations concept, Army forces will employ fully integrated intelligence, cyberspace, and electronic warfare (EW) operations to give commanders a competitive advantage to fight and win our Nation's wars as part of joint and unified land operations.
- 4. (U//FOUO) ES and signals intelligence (SIGINT) operations increase the lethality of the Army by rapidly identifying targets of interest that enable commanders to achieve their objectives through kinetic and non-kinetic fires. The Army is developing integrated SIGINT, cyberspace, and EW forces and capabilities. Integrated ES and SIGINT operations provide a mutually supporting and synchronized fusion of operations and intelligence.
- 5. (U//FOUO) ES is a shared task between EW and SIGINT personnel. The Army's guidance and authorities for EW lack clarity, particularly as they pertain to the distinction in tasks between ES and SIGINT activities. Resolving this ambiguity is a precondition for the Army to provide fully integrated intelligence, cyberspace, and EW support echelons theater strategic to tactical. In short, SIGINT and EW professionals conducting integrated, synchronized ES operations must be capable of searching, detecting, and examining emitter attributes with sufficiency to identify signals of interest and distinguish between communication networks using similar emitters.

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- 6. (U//FOUO) Pursuant to guidance from the Joint Chiefs of Staff on joint EMS operations (reference a), Army EW personnel are authorized to conduct ES under the direct authority of a military commander "to search for, intercept, identify, locate and localize sources of intentional or unintentional radiated EM energy" in support of operational needs for indications and warning, situational awareness, targeting, and the conduct of electronic attack.
- a. (U//FOUO) To create the most lethal and capable force at the tactical level, EW personnel must be empowered and enabled to search for, intercept, identify, characterize, locate, and target adversary signals of interest to deny, degrade, or disrupt a wide variety of signaling across the EMS. To achieve this, EW and SIGINT personnel must be equipped with a robust capability that incorporates automation and machine learning.
- b. (U//FOUO) Given guidance related to joint EMS operations and today's dynamic electromagnetic-based military and commercial off-the-shelf single channel, spread spectrum, digital and analog communication and noncommunications systems, EW and SIGINT operations must be enabled to quickly and efficiently search, intercept, detect, identify, and locate a wide variety of emitters across the EMS. Actions to identify an emitter requires demodulation, communications externals analysis, and signals externals parameters analysis for the purposes of deriving information about emitter location, signal structure, radio frequency, intra-pulse timing, modulation type, randomization, error correction, multiplexing, frame structure, and other parameters that define a specific signal.
- c. (U//FOUO) EW and SIGINT personnel identify emitters in the EMS. EW and SIGINT personnel conduct ES to acquire combat information in support of a commander's maneuver plan. No requirement or restriction exists for EW personnel to have SIGINT authorities to conduct these activities. EW personnel characterize and identify emitters through analysis of signals externals for immediate threat recognition and warning, force protection, and targeting. However, SIGINT personnel conduct signals analysis of internal signal parameters to produce and disseminate intelligence, which requires SIGINT authorities.
- 7. (U//FOUO) The Deputy Chief of Staff (DCS), G-3/5/7 executes management and oversight of Army EW through the Director, Cyber Directorate, who has primary responsibility for implementing EW policy. The Director, Cyber Directorate will:
- a. U) ensure details clarifying permissible ES tasks and functions of Army EW professionals in support of tactical operations are codified in Army Regulation 525-22 (U.S. Army Electronic Warfare) (reference j).

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- b. (U) coordinate with U.S. Army Forces Command to ensure the application of training standards for achieving unit, collective, and individual EW training as well as integrated SIGINT and EW training.
- c. (U) coordinate with U.S. Army Training and Doctrine Command, Cyber Center of Excellence to:
- (1) (U) train EW professionals to standards of technical and tactical proficiency required by Department of Defense regulations and authorities.
- (2) (U) ensure training achieves robust, mutually supporting ES capabilities for both SIGINT and EW professionals fielding integrated SIGINT, cyberspace, and EW capabilities and forces.
- (3) (U) pursue methods to train and educate current and future Army leaders on EW authorities and the use of EW capabilities in support of Army missions.
- (4) (U) develop an implementation plan and training strategy that ensures EW professionals will improve Soldier lethality beyond 2030.
- d. (U) coordinate with U.S. Army Intelligence and Security Command to fulfill National Security Agency individual training requirements.
- 8. (U//FOUO) The DCS, G-2 and DCS, G-3/5/7 will establish a working group to develop an implementation plan to address EW and SIGINT integration. The working group will fall under the governance of the G-3/5/7 Army Cyberspace Council.
- 9. (U//FOUO) The DCS, G-2 will define an intelligence support strategy to enable Army EW operations.
- 10. (U//FOUO) This directive applies to the Regular Army, Army National Guard/Army National Guard of the United States, and U.S. Army Reserve as it pertains to development, fielding of, and training on new and existing capabilities for the conduct of ES carried out under Secretary of the Army authority.
- 11. (U//FOUO) The DCS, G-3/5/7 is the proponent for this policy and will revise Army Regulation 525-22 to include the provisions of this directive and implementing guidance developed from the working group within 2 years of the date of this directive.

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12. (U//FOUO) This directive is rescinded upon publication of the revised regulation.

Encl

Ryan D. McCarthy
Performing the Duties
of the Secretary of the Army

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# REFERENCES

- a. (U) Chairman Joint Chief of Staff Instruction 3320.01D (Joint Electromagnetic Spectrum Operations (JEMSO)), (classified), 21 January 2013.
- b. (U) Department of Defense (DoD) Directive 3000.06 (Combat Support Agencies (CSAs)); June 27, 2013; Incorporating Change 1, Effective 8 July 2016.
- c. (U//FOUO) DoD Directive 3222.04 (Electronic Warfare (EW) Policy); 26 March 2014; Incorporating Change 1, Effective 10 May 2017.
- d. (U) DoD Directive 5100.20 (National Security Agency/Central Security Service (NSA/CSS)), 26 January 2010.
- e. (FOUO) DoD Instruction O-3115.07 (Signals Intelligence (SIGINT)), 15 September 2008, Incorporating Change 1, 19 November 2010.
- f. (U) Joint Publication 3-13.1 (Electronic Warfare), 8 February 2012.
- g. (U/FOUO) U.S. Signals Intelligence Directive (USSID) SG1283 (SIGINT Support to Electronic Warfare Operations) (classified), 27 August 1997.
- h. (U) Department of the Army General Orders. No. 2019-01 (Assignment of Functions and Responsibilities within Headquarters, Department of the Army), 15 May 2019.
- i. (U) Army Regulation 10-87 (Army Commands, Army Service Component Commands, and Direct Reporting Units), 11 December 2017.
- j. (U//FOUO) Army Regulation 525-22 (U.S. Army Electronic Warfare), 28 January 2016.
- k. (U) Army Doctrine Reference Publication 3-0 (Operations), 6 October 2017.
- I. (U) U.S. Army Training and Doctrine Command Pamphlet 525-3-1 (The U.S. Army In Multi-Domain Operations 2028).